

WHAT IS CLAIMED IS:

1 1. A device for holding a piece in a bore, comprising:
2 a cylindrical sleeve constructed to be inserted into
3 the bore and held therein by engagement of its outer
4 surface with an inner surface of the bore;
5 and a series of fins extending longitudinally of an
6 inner surface of the sleeve and projecting inwardly from
7 the inner surface of the sleeve, the fins being spaced from
8 each other circumferentially of the sleeve with tips
9 disposed to engage an outer surface of a piece inserted
10 into the sleeve,
11 wherein the sleeve and the fins are integrally formed
12 of resilient flexible plastic, the fins are skewed in a
13 same circumferential direction relative to radial planes of
14 the sleeve, a dimension of each fin along a direction of
15 its inward projection is substantially greater than the
16 thickness of the fin, and the flexibility of the fins is
17 such that the fins can be readily deflected when engaged by
18 an inserted piece.

1 2. A device according to Claim 1, wherein the fins
2 have longitudinal ends that face longitudinal ends of the
3 sleeve, respectively, and at least one longitudinal end of
4 the fins extends away from the respective longitudinal end
5 of the sleeve and away from the inner surface of the
6 sleeve.

1 3. A device according to Claim 2, wherein each fin
2 has trapezoidal longitudinal side surfaces.

1 4. A device according to Claim 1, wherein the device
2 is formed of molded plastic.

1 5. A device according to Claim 4, wherein the device
2 further comprises a plurality of abutments projecting
3 inwardly from the inner surface of the sleeve for
4 engagement with ejector pins of molding apparatus, the
5 abutments are spaced inwardly from the longitudinal ends of
6 the sleeve, and the sleeve has slots aligned with the
7 abutments to permit engagement of the ejector pins with the
8 abutments.

1 6. A device according to Claim 1, wherein the
2 longitudinal ends of the fins are spaced from the
3 respective longitudinal ends of the sleeve.

1 7. A device according to Claim 1, wherein the fins
2 extend to the longitudinal ends of the sleeve.

1 8. A device according to Claim 1, wherein end
2 portions of the sleeve adjacent to the longitudinal ends of
3 the sleeve, respectively, have an outer diameter that
4 increases away from the respective longitudinal ends of the
5 sleeve.

1 9. A device according to Claim 8, wherein the
2 longitudinal ends of the fins are spaced from the
3 respective longitudinal ends of the sleeve and said end
4 portions have a substantially uniform inner diameter
5 between the respective longitudinal ends of the sleeve and
6 the fins.

1 10. A device according to Claim 8, wherein the
2 longitudinal ends of the fins are spaced from the

3 respective longitudinal ends of the sleeve and said end
4 portions have an inner diameter that increases between the
5 respective longitudinal ends of the sleeve and the fins.

1 11. A device according to Claim 1, wherein the
2 longitudinal ends of the sleeve are flat.

1 12. A device comprising:
2 a cylindrical sleeve;
3 and a series of fins extending longitudinally of an
4 inner surface of the sleeve and projecting inwardly from
5 the inner surface of the sleeve, the fins being spaced from
6 each other circumferentially of the sleeve with tips
7 disposed to engage an outer surface of a piece inserted
8 into the sleeve,

9 wherein the sleeve and the fins are integrally formed
10 of resilient flexible plastic, the fins are skewed relative
11 to radial planes of the sleeve, the flexibility of the fins
12 is such that the fins can be readily deflected when engaged
13 by an inserted piece, and each fin is tapered by having at
14 least one longitudinal end that extends away from a
15 respective longitudinal end of the sleeve and away from the

16 inner surface of the sleeve.

1 13. A device according to Claim 12, wherein each fin
2 has trapezoidal longitudinal side surfaces.

1 14. A device according to Claim 12, wherein the fins
2 are skewed in a same circumferential direction relative to
3 radial planes of the sleeve and a dimension of each fin
4 along a direction of its inward projection is substantially
5 greater than the thickness of the fin.

1 15. A device according to Claim 12, wherein the device
2 is formed of molded plastic.

1 16. A device according to Claim 15, wherein the device
2 further comprises a plurality of abutments projecting
3 inwardly from the inner surface of the sleeve for
4 engagement with ejector pins of molding apparatus, the
5 abutments are spaced inwardly from the longitudinal ends of
6 the sleeve, and the sleeve has slots aligned with the
7 abutments to permit engagement of the ejector pins with the
8 abutments.

1 17. A device according to Claim 12, wherein the
2 longitudinal ends of the fins are spaced from the
3 respective longitudinal ends of the sleeve.

1 18. A device according to Claim 12, wherein the fins
2 extend to the longitudinal ends of the sleeve.

1 19. A device according to Claim 12, wherein end
2 portions of the sleeve adjacent to the longitudinal ends of
3 the sleeve, respectively, have an outer diameter that
4 increases away from the respective longitudinal ends.

1 20. A device according to Claim 19, wherein the
2 longitudinal ends of the fins are spaced from the
3 respective longitudinal ends of the sleeve and said end
4 portions have a substantially uniform inner diameter
5 between the respective longitudinal ends of the sleeve and
6 the fins.

1 21. A device according to Claim 19, wherein the
2 longitudinal ends of the fins are spaced from the
3 respective longitudinal ends of the sleeve and said end

4 portions have an inner diameter that increases between the
5 respective longitudinal ends of the sleeve and the fins.

1 22. A device according to Claim 12, wherein the
2 longitudinal ends of the sleeve are flat.